

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P458951

Luminaire Tested: **GALN-SA4D-735-U-AFL-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458951
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4D-735-U-AFL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23357 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

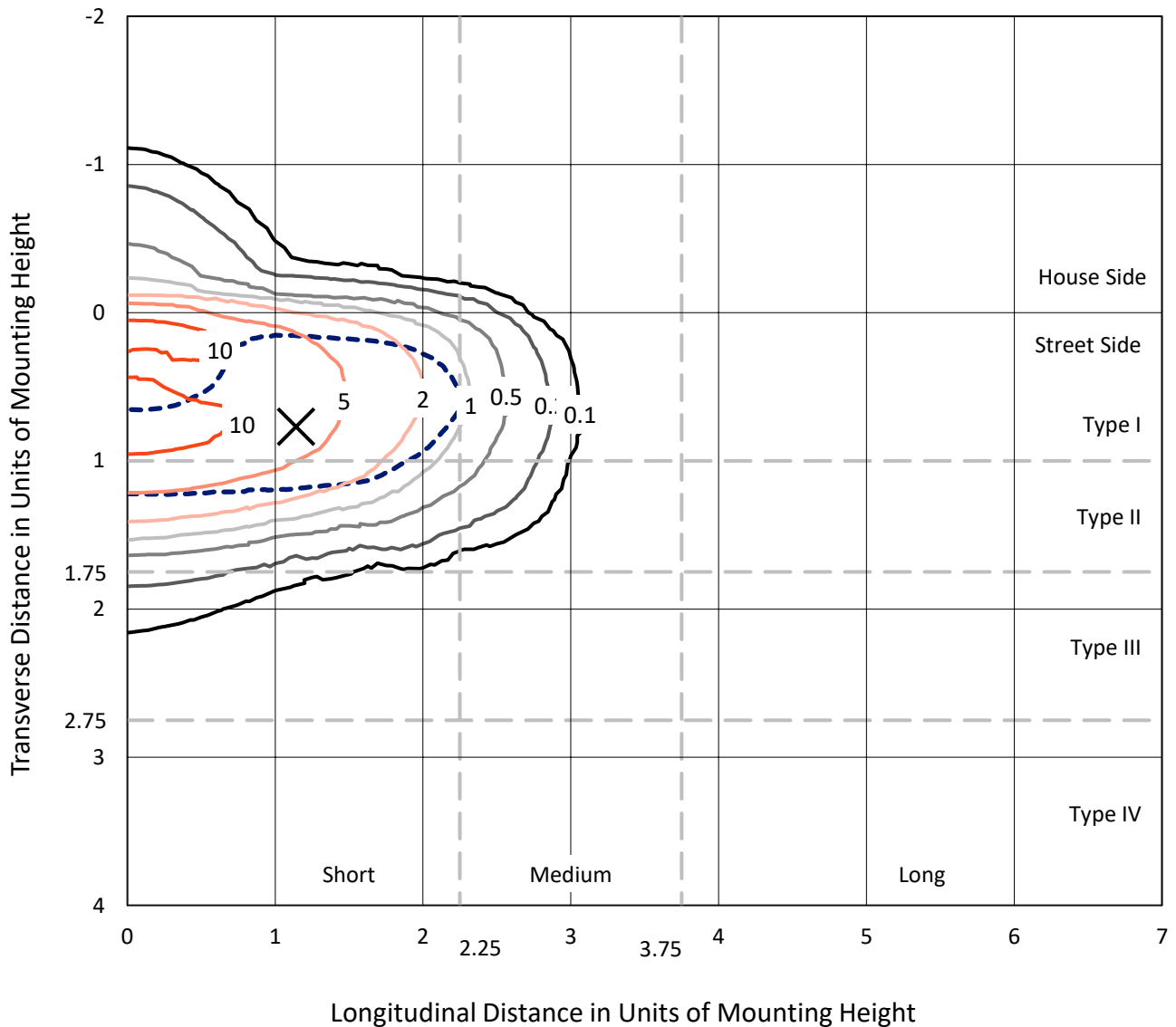
Input Watts (W): 245
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P458951
 CATALOG NUMBER: GALN-SA4D-735-U-AFL-HSS

Iso-Footcandle Lines of Horizontal Illumination

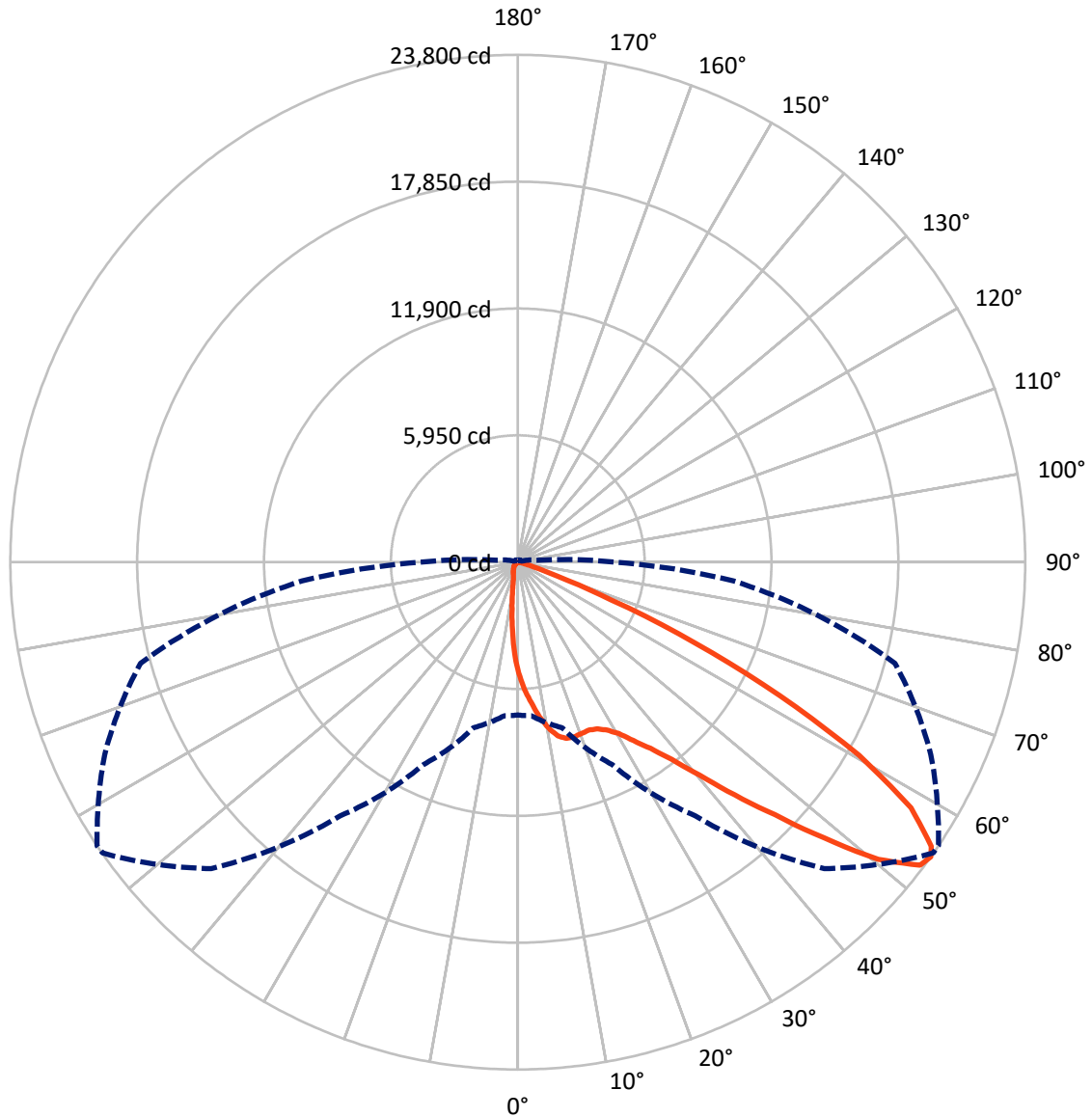
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.4 fc
 Type II - Short - N/A

REPORT NUMBER: P458951
CATALOG NUMBER: GALN-SA4D-735-U-AFL-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 54-Deg Vertical

REPORT NUMBER: P458951

CATALOG NUMBER: GALN-SA4D-735-U-AFL-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1104.5	0.0	1104.5
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	22252.5	0.0	22252.5
	% Fixture	95.3	0.0	95.3
Total	Lumens	23357.0	0.0	23357.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	458.5	2.0
10°-20°	1239.6	5.3
20°-30°	2146.9	9.2
30°-40°	3705.9	15.9
40°-50°	6307.6	27.0
50°-60°	6242.2	26.7
60°-70°	2849.1	12.2
70°-80°	365.9	1.6
80°-90°	41.2	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	23357.0	100.0
0°-180°	23357.0	100.0



REPORT NUMBER: P458951

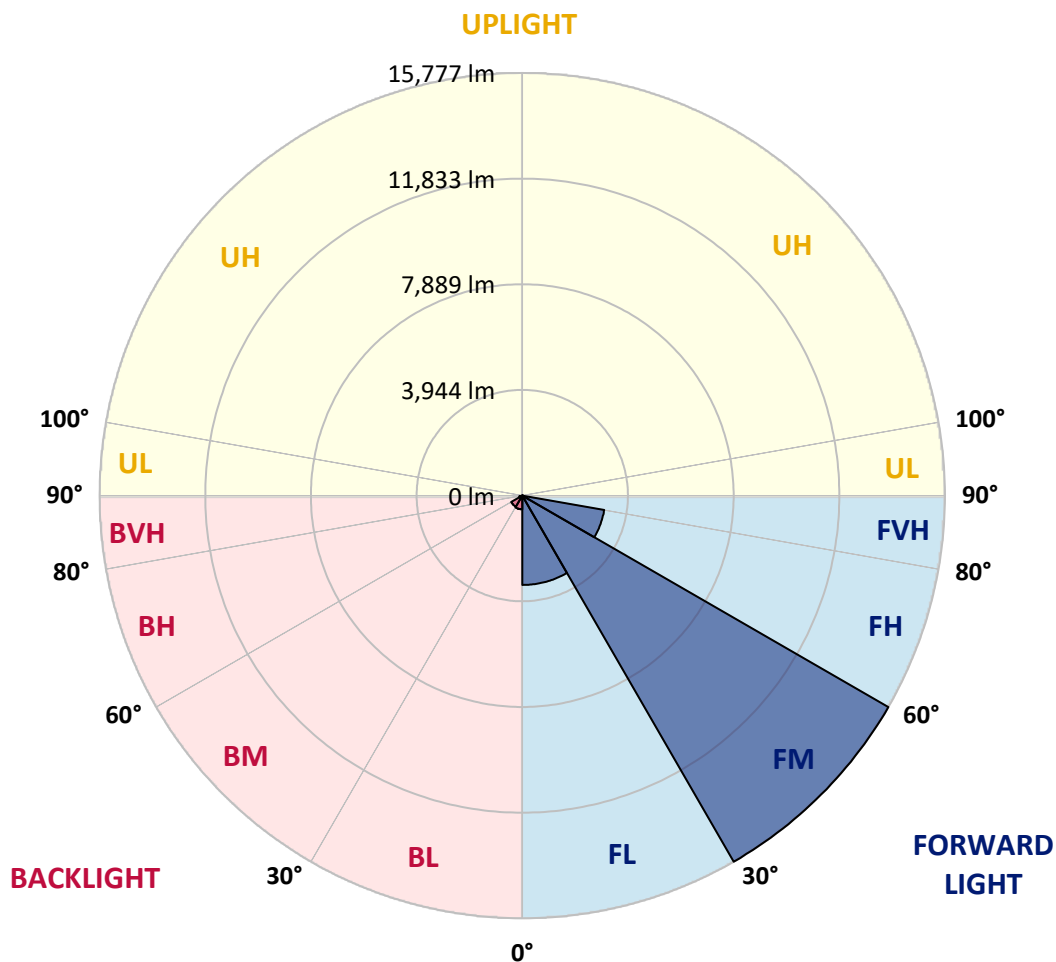
CATALOG NUMBER: GALN-SA4D-735-U-AFL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3334.3	14.3			
FM (30°-60°)	15777.0	67.5			
FH (60°-80°)	3104.4	13.3			G2/5000
FVH (80°-90°)	36.8	0.2			G1/100
BL (0°-30°)	510.8	2.2	B2/1000		
BM (30°-60°)	478.7	2.0	B1/1000		
BH (60°-80°)	110.6	0.5	B1/500		G1/500
BVH (80°-90°)	4.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





REPORT NUMBER: P458951

CATALOG NUMBER: GALN-SA4D-735-U-AFL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	5189.3	5189.3	5189.3	5189.3	5189.3	5189.3	5189.3	5189.3	5189.3	5189.3	5189.3
2.5°	6594.9	6549.2	6486.2	6437.3	6322.3	6156.8	5981.9	5981.9	5813.3	5578.5	5339.0
5°	7606.6	7576.7	7515.2	7389.1	7259.9	7028.3	6676.9	6615.4	6314.4	5888.9	5441.4
7.5°	8017.9	8032.1	8035.2	8002.1	7940.7	7712.2	7363.9	7321.4	6840.7	6270.3	5575.3
10°	7623.9	7693.3	7761.0	7898.1	8092.0	8147.1	7950.1	7906.0	7433.3	6656.4	5720.3
12.5°	7037.7	7075.5	7113.4	7329.2	7718.5	8164.4	8370.9	8369.3	7969.0	7040.9	5904.7
15°	6765.1	6798.2	6801.3	6897.5	7234.7	7883.9	8550.5	8574.2	8492.2	7515.2	6103.2
17.5°	6821.8	6848.6	6826.6	6850.2	7026.7	7575.1	8530.0	8608.8	8916.1	7970.6	6282.9
20°	7192.2	7244.2	7159.1	7092.9	7146.5	7493.1	8460.7	8571.0	9215.5	8415.0	6446.8
22.5°	7857.2	7885.5	7778.4	7597.1	7502.6	7664.9	8441.8	8550.5	9470.8	8779.0	6541.3
25°	8596.2	8586.8	8468.6	8265.3	8066.7	8011.6	8566.3	8664.0	9682.0	9106.8	6569.7
27.5°	9335.3	9363.7	9165.1	8913.0	8675.0	8531.6	8845.2	8917.7	9919.9	9480.3	6604.4
30°	10194.1	10148.4	9953.0	9664.7	9392.0	9191.9	9294.3	9314.8	10247.7	9975.1	6695.8
32.5°	11311.4	11185.3	10966.3	10462.0	10266.6	9927.8	9953.0	9978.2	10646.4	10465.2	6806.1
35°	12827.4	12821.1	12392.4	11713.2	11237.3	10816.6	10706.3	10726.8	11249.9	11193.2	7050.3
37.5°	14652.2	14677.4	14188.9	13505.0	12628.8	11960.7	11733.7	11736.9	12167.1	12198.6	7422.2
40°	16138.2	16204.4	15912.9	15451.1	14586.0	13541.2	13159.9	13125.2	13456.1	13416.7	7953.3
42.5°	16778.0	16839.5	16948.2	17108.9	16633.0	15771.0	14871.2	14918.5	15019.4	14743.6	8549.0
45°	16464.4	16562.1	16989.2	17982.0	18429.5	18139.5	17066.4	16900.9	16473.9	16185.5	9147.8
47.5°	15158.0	15396.0	16109.9	17762.9	19329.3	20309.5	19543.6	19324.6	17930.0	17238.2	9529.1
50°	13010.2	13024.3	14018.7	16131.9	18862.9	21678.9	22072.8	21909.0	19286.8	17829.1	9721.4
52.5°	9431.4	9741.9	10652.7	13100.0	16842.6	21470.9	23684.9	23617.2	20686.1	18131.7	9998.7
54°	7170.1	7230.0	8040.0	10468.3	14521.4	20328.4	23784.2	23800.0	21381.1	18314.5	10162.6
55°	5877.9	5734.5	6585.5	8917.7	12937.7	19318.3	23459.6	23535.2	21693.1	18409.0	10284.0
57.5°	2786.1	2787.7	3438.5	4703.9	8103.0	15000.5	21475.6	21743.5	21727.7	18571.3	10657.4
60°	1410.4	1419.8	1563.2	2171.5	4002.6	9971.9	17756.6	18394.8	20055.8	18595.0	10780.3
62.5°	986.5	975.4	951.8	1044.8	1684.6	5067.9	13219.8	13774.5	17039.6	17695.2	10389.5
65°	844.7	821.0	754.8	740.6	851.0	2018.7	8233.8	9138.3	13010.2	15321.9	9277.0
67.5°	721.7	712.3	652.4	616.2	602.0	879.3	4248.5	4724.4	8892.5	11013.6	7026.7
70°	613.0	608.3	572.0	526.3	486.9	526.3	1575.8	1952.5	4956.0	5929.9	3315.6
72.5°	498.0	502.7	509.0	450.7	409.7	373.5	672.9	783.2	2073.8	2119.5	1159.8
75°	436.5	431.8	431.8	392.4	342.0	277.3	370.3	398.7	635.1	589.4	269.5
77.5°	307.3	296.3	346.7	323.0	285.2	197.0	211.2	223.8	263.2	225.3	126.1
80°	212.7	212.7	222.2	290.0	256.9	143.4	129.2	138.7	156.0	133.9	72.5
82.5°	119.8	122.9	145.0	154.4	149.7	96.1	85.1	86.7	104.0	91.4	45.7
85°	14.2	23.6	83.5	81.9	61.5	42.5	47.3	48.9	64.6	56.7	26.8
87.5°	1.6	3.2	17.3	22.1	15.8	17.3	17.3	17.3	22.1	25.2	18.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P458951

CATALOG NUMBER: GALN-SA4D-735-U-AFL-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5189.3	5189.3	5189.3	5189.3	5189.3	5189.3	5189.3	5189.3	5189.3	5189.3	5189.3
2.5°	5209.7	5090.0	4804.7	4473.8	4262.7	3919.1	3629.2	3419.6	3367.6	3266.7	3296.7
5°	5203.4	4954.5	4373.0	3758.4	3102.8	2614.3	2250.3	1963.5	1837.4	1753.9	1695.6
7.5°	5206.6	4817.4	3884.5	2905.9	2122.7	1643.6	1306.4	1131.5	1014.8	966.0	972.3
10°	5216.0	4662.9	3317.2	2152.6	1432.4	1062.1	855.7	772.2	732.8	726.5	724.9
12.5°	5238.1	4494.3	2775.1	1597.9	1002.2	772.2	693.4	665.0	652.4	652.4	647.7
15°	5261.7	4308.4	2324.4	1188.2	772.2	663.4	627.2	613.0	605.1	605.1	603.5
17.5°	5261.7	4094.0	1903.6	921.9	665.0	609.9	581.5	562.6	556.3	556.3	554.7
20°	5228.7	3845.1	1530.1	742.2	603.5	559.4	531.1	510.6	502.7	499.5	498.0
22.5°	5113.6	3512.6	1218.1	638.2	553.1	515.3	479.1	455.4	449.1	446.0	447.5
25°	4908.8	3137.5	964.4	561.0	507.4	461.7	430.2	412.9	406.6	406.6	408.1
27.5°	4697.6	2745.1	764.3	502.7	452.3	411.3	386.1	375.1	373.5	378.2	379.8
30°	4502.2	2351.2	619.3	455.4	403.4	368.7	351.4	348.3	348.3	349.8	351.4
32.5°	4284.7	2006.0	518.5	414.4	364.0	334.1	324.6	324.6	327.8	327.8	330.9
35°	4147.6	1709.8	455.4	375.1	334.1	308.9	302.6	304.1	308.9	315.2	318.3
37.5°	4073.6	1473.4	414.4	343.5	305.7	288.4	282.1	285.2	296.3	307.3	308.9
40°	4079.9	1295.3	381.4	316.7	283.7	264.7	260.0	269.5	280.5	291.5	293.1
42.5°	4149.2	1163.0	349.8	285.2	264.7	238.0	236.4	245.8	250.6	261.6	263.2
45°	4231.1	1066.8	316.7	252.1	230.1	206.4	208.0	215.9	222.2	239.5	242.7
47.5°	4256.4	1000.7	278.9	214.3	189.1	181.2	182.8	187.5	200.1	215.9	217.5
50°	4284.7	959.7	242.7	181.2	160.7	159.2	160.7	163.9	171.8	178.1	176.5
52.5°	4406.1	958.1	212.7	157.6	137.1	140.3	141.8	140.3	133.9	124.5	121.3
54°	4519.5	962.8	198.6	146.6	126.1	130.8	129.2	121.3	105.6	96.1	91.4
55°	4610.9	967.6	190.7	138.7	119.8	121.3	122.9	107.2	86.7	77.2	74.1
57.5°	4790.6	956.5	171.8	121.3	105.6	99.3	97.7	70.9	47.3	41.0	37.8
60°	4700.7	863.6	156.0	104.0	89.8	80.4	66.2	39.4	23.6	17.3	17.3
62.5°	4347.8	732.8	138.7	85.1	74.1	61.5	34.7	22.1	11.0	6.3	4.7
65°	3889.2	616.2	124.5	67.8	58.3	39.4	18.9	14.2	4.7	0.0	0.0
67.5°	2891.7	457.0	105.6	53.6	44.1	25.2	12.6	7.9	1.6	0.0	0.0
70°	1339.5	278.9	89.8	41.0	31.5	18.9	9.5	4.7	0.0	0.0	0.0
72.5°	384.5	174.9	74.1	29.9	22.1	15.8	7.9	3.2	1.6	0.0	0.0
75°	133.9	140.3	55.2	22.1	17.3	11.0	6.3	3.2	1.6	0.0	0.0
77.5°	80.4	113.5	34.7	18.9	14.2	9.5	6.3	3.2	1.6	1.6	0.0
80°	45.7	75.6	22.1	15.8	12.6	7.9	4.7	3.2	1.6	1.6	0.0
82.5°	25.2	36.2	17.3	14.2	11.0	7.9	4.7	3.2	1.6	1.6	1.6
85°	20.5	18.9	14.2	12.6	9.5	6.3	4.7	1.6	0.0	0.0	0.0
87.5°	15.8	12.6	12.6	12.6	9.5	6.3	4.7	1.6	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)